

Reflection Discussion

• Good Teacher

- control the class
- values, respects you - demands respect
- sense humor
- energetic, interactive
- gets students involved
- makes sure they understand
- kids + teacher having fun
- candy, no HW, \$

Good Student

- quiet
- respectful
- pays attention to teacher
- not talking during instruction
- prepared
- Does HW, turns in on time
- focused

I'm thinking of a number.

- I multiplied my number by 4
- Added 3
- and ended with 27

$$27 - 3 = \frac{24}{4} = 6$$

What is my number? ~~8~~, 6

$$X \cdot 4 + 3 = 27$$

I'm thinking of a number.

- I multiplied my number by 7
- Subtracted 14
- and ended with 42

$$\begin{array}{r} 7 \cdot 8 = 56 \\ - 14 \\ \hline 42 \end{array}$$

What is my number? ~~4~~, 8

$$42 + 14 = 56 \div 7 = 8$$

$$x \cdot 7 - 14 = 42$$

$$\begin{array}{l} 47 \div 7 = 6 \\ 14 \div 7 = 2 \\ \hline 8 \end{array}$$

I'm thinking of a number.

- I divided my number by 3

÷

- Added 23

- and ended with 29

$$\begin{array}{r} 29 \\ - 23 \\ \hline 6 \\ 3 \cdot 2 = 6 \end{array}$$

What is my number? ~~2~~, 18, ~~9~~

$$\frac{X}{3} + 23 = 29$$

$$\begin{array}{r} 29 \\ - 23 \\ \hline 6 \end{array} \cdot 3 = 18$$

I'm thinking of a number.

- I divided my number by 6
- Added 30
- and ended with 46

What is my number?

Solving Equations

Example: a) $5x + 6 = 31$

$$\begin{array}{rcl}
 x & & 31 \\
 \cdot 5 & & - 6 \\
 + 6 & & \div 5 \\
 = 31 & & = 5
 \end{array}$$

$$b) \frac{x}{4} - 10 = 1$$

$$\begin{array}{rcl}
 x & & 1 \\
 \div 4 & & + 10 \\
 - 10 & & \cdot 4 \\
 = 1 & & = 44
 \end{array}$$

Solve for x

Ⓐ $4x - 6 = 14$

$x = 5$

$$\begin{array}{r} x \quad 2 \\ \div 2 \quad +14 \\ -14 \quad \cdot 2 \\ \hline =2 \quad =32 \end{array}$$

Ⓑ $\frac{x}{2} - 14 = 2$

$x = 4, 8$ 32

Ⓒ $6x - 4 = 20$

$x = 4$

$$\begin{array}{r} x \quad 7 \\ +2 \quad \cdot 4 \\ \div 4 \quad -2 \\ \hline =7 \quad =26 \end{array}$$

Ⓓ $\frac{(x+2)}{4} = 7$

$x = 12, 26$

Ⓔ $4x + 2 = 12$

$x = 2.5$

$$\begin{array}{r} x \quad 26 \\ \cdot 8 \quad +5 \rightarrow 31 \\ -5 \quad \div 8 \\ \hline =26 \quad =3.875 \end{array}$$

Ⓕ $8x - 5 = 26$

$x = 3.875$

$x = 3.9$

$x = 2.6$

$x = 8.25$

Evaluate:

$$\textcircled{a} \quad 8 + 5 \cdot 2 = 18$$

$$\textcircled{b} \quad 10 - \underline{8 \div 4} + 5 = 13$$
$$10 - 2 + 5 = \textcircled{13}$$

Order of operations

- ① Parentheses
- ② Exponents
- ③ Multiplication and division
- ④ Addition and subtraction

Dice Game

I will roll 4 dice. Use the numbers rolled and the operations $+$, $-$, \times , \div , raising to a power, and parentheses to try to get the numbers below. You must use all 4 numbers and use each only once. Any incorrect solutions will be scored against you.

- Any Number: 1 pt.
- 1 = 2 pts.
- 0 = 3 pts.
- 25 = 4 pts.
- 51 = 7 pts.

$$2, 4, 5, 6 \rightarrow \underset{2}{(4-2)} - \underset{1}{(6-5)} = 1 \quad (2 \text{ pts})$$

$$2, 2, 2, 5 \rightarrow$$

$$1, 3, 3, 3 \rightarrow (3-3) \cdot 3 \cdot 1 = 0 \quad (3 \text{ pts})$$

$$1, 1, 3, 3 \rightarrow 3^3 - 1 - 1 = 25 \quad (4 \text{ pts})$$

$$2, 3, 5, 6 \rightarrow 5 \cdot 6 - 3 + 2 = 25 \quad (4 \text{ pts})$$

$$5, 5, 6, 6 \rightarrow (6-6) + (5 \cdot 5) = 25 \quad (4 \text{ pts})$$

$$1, 2, 3, 4 \rightarrow 4 - 3 \div 2 \sim 1 =$$

Homework

sect. 4.1 #2, 8, 9, 11